

What is claimed is:

1. A method of providing a metal seed layer substantially free of discontinuities disposed on a substrate comprising the step of contacting a metal seed layer disposed on a substrate with an electroplating bath comprising a) a source of metal ions; b) an electrolyte comprising two or more acids; c) and optionally one or more additives.
2. The method of claim 1 wherein the two or more acids are selected from organic acids, inorganic acids, or mixtures thereof.
3. The method of claim 2 wherein the organic acids are selected from alkylsulfonic acids, aryl sulfonic acids, carboxylic acids or halogenated acids.
4. The method claim 2 wherein the inorganic acids are selected from sulfuric acid, phosphoric acid, nitric acid, hydrogen halide acids, sulfamic acid or fluoroboric acid.
5. The method of claim 1 wherein the two or more acids are present in an amount of from about 1 to about 350 g/L.
6. The method of claim 1 wherein the source of metal ions is a source of copper ions.
7. The method of claim 6 wherein the source of copper ions is selected from copper sulfates, copper acetates, copper fluoroborate, or cupric nitrates.
8. The method bath of claim 6 wherein the source of copper ions is present in an amount of from about 1 to about 300 g/L.
9. The method of claim 1 wherein the electrolyte further comprises a source of halide ions.
10. A method of manufacturing an electronic device comprising the step of contacting a metal seed layer disposed on a substrate with an electroplating bath comprising a) a source of metal ions; b) an electrolyte comprising two or more acids; c) and optionally one or more additives.
11. The method of claim 10 wherein the two or more acids are selected from organic acids, inorganic acids, or mixtures thereof.
12. The method of claim 11 wherein the organic acids are selected from alkylsulfonic acids, aryl sulfonic acids, carboxylic acids or halogenated acids.

13. The method claim 11 wherein the inorganic acids are selected from sulfuric acid, phosphoric acid, nitric acid, hydrogen halide acids, sulfamic acid or fluoroboric acid.

14. The method of claim 10 wherein the two or more acids are present in an amount of from about 1 to about 350 g/L.

15. The method of claim 10 wherein the source of metal ions is a source of copper ions.

16. The method of claim 15 wherein the source of copper ions is selected from copper sulfates, copper acetates, copper fluoroborate, or cupric nitrates.

17. The method bath of claim 15 wherein the source of copper ions is present in an amount of from about 1 to about 300 g/L.

18. The method of claim 10 wherein the electrolyte further comprises a source of halide ions.

19. An article of manufacture comprising an electronic device substrate containing one or more apertures, each aperture containing a seed layer deposit obtained from an electroplating composition that comprises a) a source of metal ions; b) an electrolyte comprising two or more acids; c) and optionally one or more additives.

20. A method for removing excess material from a semiconductor wafer containing one or more apertures by using a chemical mechanical planarization process which comprises contacting the semiconductor wafer with a rotating polishing pad thereby removing the excess material from the semiconductor wafer; wherein the apertures contain a seed layer deposit obtained from an electroplating composition that comprises a) a source of metal ions; b) an electrolyte including two or more acids; c) and optionally one or more additives.

21. The method of claim 20 wherein the polishing pad is grooved.

22. The method of claim 20 wherein the semiconductor wafer is also subjected to a polishing slurry.